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"Compressing Over-the-Counter Markets",

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Preliminary remark

- The opinions expressed in this presentation do not reflect EBA position on compression.
- The discussant supports both the theoretical and empirical work done on Compression.

Efficiency analysis

efficiency analysis

- The efficiency analysis evaluates the maximum theoretical level of notional that a compression operation can eliminate -> Theoretical base is that all the CNTPs are the same, i.e. same risk
- *"higher netting opportunities arise when participants are less conservative in their original sets of counterparties"* -> Obvious
- "*Nevertheless, we find that the efficiency of a conservative* ***compression is impaired*** *if market* ***participants seek to bilaterally net out their positions beforehand****. This effect is dampened when compression preferences are relaxed in the intra-dealer segment.*" -> How correct is measuring efficiency in this way? Assuming counterparties are all the same and are all available for compression
- *"This so-called* ***excess indicator****, in turn, corresponds to the maximum amount of notional eligible for compression. Importantly, our results show that an explicit modeling of the entire network of bilateral obligations is necessary to estimate the efficiency of portfolio compression."* -> Over estimation of efficiency if we consider all the network and considering all the subjects are the same and available for compression;

Efficiency analysis

efficiency analysis

- The paper consider four cases: Conservative, Non-Conservative, Hybrid and Bilateral Compression. -> Theoretically these cases are fine, but in reality can we really consider the "non conservative case"? Also Hybrid seems far-fetched. Not all the dealers are the same.
- *"The results show the existence of a trade-off between the degree of portfolio conservation and the level of efficiency."* -> Was this ever under discussion?
- Compression efficiency ranking *the following weak dominance holds:*

$$\rho_b \leq \rho_c \leq \rho_h \leq \rho_{nc} = 1$$

Issues for discussion

- 1) Ranking comes from minimization exercise: not surprising
- 2) NC and H are even feasible? Should you consider a 5th case (more realistic), between conservative and hybrid?
- 3) If we measure the efficiency with respect NC case, don't we give false expectation?

Notion of Exposure

Exposure

- "*clearing also duplicates the notional value of each obligations. The effect of central clearing on market excess is therefore ambiguous by construction*" -> Notional exposure is not risk; CCP have PD lower than Dealers, therefore Risk and Capital requirements are lower.
- Markets with several CCPs prevent large netting opportunities among common clearing members. -> Competition in CCPs market is overall low (few subjects focused/specialised on specific products)

Issues for discussion:

- 4) Exposure is not Risk (Exp * PD)
- 5) CCPs -> increase EXP (more notional), but decrease risk (PD of CCP is low)

Additional points

- **Number of trials?**

Total Excess	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16
min	0.529	0.513	0.475	0.420	0.533	0.403	0.532
max	0.904	0.914	0.895	0.901	0.903	0.890	0.869
mean	0.769	0.777	0.766	0.757	0.751	0.728	0.734
stdev	0.077	0.082	0.085	0.090	0.082	0.096	0.080
first quart.	0.719	0.733	0.712	0.703	0.693	0.660	0.678
median	0.781	0.791	0.783	0.769	0.758	0.741	0.749
third quart.	0.826	0.847	0.832	0.822	0.808	0.802	0.796

Table 2: Statistics of market excess over time: share of notional in excess against total gross notional for each market.

Bilateral (ρ_b)	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16
min	0.278	0.281	0.286	0.277	0.276	0.276	0.260
max	0.779	0.791	0.759	0.777	0.717	0.711	0.746
mean	0.528	0.536	0.524	0.522	0.513	0.512	0.543
stdev	0.101	0.106	0.103	0.105	0.107	0.109	0.108
first quart.	0.464	0.460	0.469	0.452	0.448	0.444	0.448
median	0.526	0.542	0.535	0.530	0.517	0.528	0.555
third quart.	0.583	0.597	0.590	0.600	0.596	0.597	0.623
Conservative (ρ_c)	**Oct-14**	**Jan-15**	**Apr-15**	**Jul-15**	**Oct-15**	**Jan-16**	**Apr-16**
min	0.558	0.547	0.545	0.507	0.491	0.528	0.574
max	0.985	0.982	0.973	0.967	0.968	0.979	0.969
mean	0.836	0.857	0.848	0.843	0.828	0.827	0.834
stdev	0.091	0.087	0.090	0.091	0.104	0.106	0.090
first quart.	0.781	0.816	0.810	0.800	0.777	0.773	0.788
median	0.852	0.880	0.868	0.858	0.849	0.847	0.860
third quart.	0.906	0.925	0.913	0.915	0.902	0.907	0.904
Hybrid (ρ_h)	**Oct-14**	**Jan-15**	**Apr-15**	**Jul-15**	**Oct-15**	**Jan-16**	**Apr-16**
min	0.589	0.626	0.636	0.653	0.574	0.619	0.676
max	0.990	0.994	0.988	0.990	0.994	0.989	0.990
mean	0.878	0.898	0.894	0.893	0.881	0.882	0.898
stdev	0.079	0.072	0.074	0.073	0.085	0.080	0.069
first quart.	0.821	0.859	0.862	0.865	0.831	0.836	0.863
median	0.894	0.916	0.918	0.912	0.901	0.908	0.911
third quart.	0.935	0.952	0.947	0.951	0.948	0.945	0.947

Table 3: Statistics of compression efficiency over time: share excess eliminated after compression against original level of market excess for each market.

Additional points

- *More in general, Figure 3 suggests that a more coordinated and collective action for compression provides more efficiency. Henceforth, regulatory incentives would be more effective when favoring multilateral over bilateral compression. However, under EMIR, while there is no explicit distinction, the condition is set at the bilateral level (i.e., 500 bilateral contracts with the same counterparty), which may encourage bilateral compression. In contrast, measures based on notional approaches such as net-to-gross ratios would potentially improve incentives to compress as well as the efficiency of the multilateral exercises.*

- Very interesting observation. Care to elaborate?

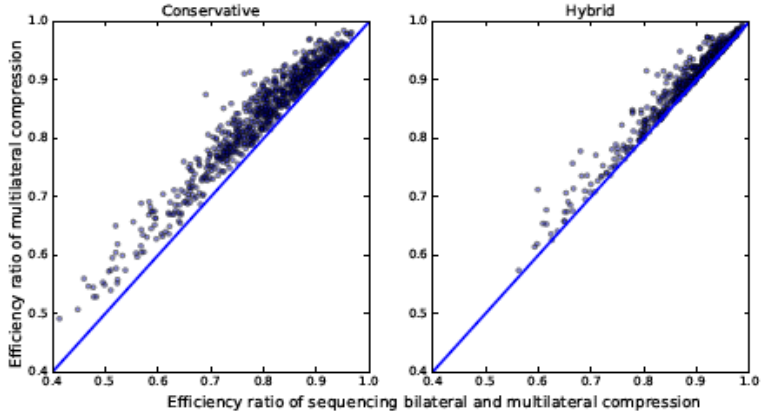

Figure 3: Comparison of the efficiency between multilateral compression in the original markets and a sequence of bilateral and multilateral compression. All snapshots and market instances are reported on the same figures.

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